

WBS 4.5

High Energy Systems

Labor Cost (\$/hr)		\$75						
WBS	Description	Total MS	Item MS	kHours	MS Purchasing	Basis		
1	Production TGT Area Transport	\$4.8						
1.1	dipoles (1)		\$1.7	15.0	\$0.6	scaled A1900 X ~2		
1.2	quad doublet (1)		\$0.6	5.2	\$0.2	scaled S800 quad X 2		
1.3	quad triplets (1)		\$2.5	22.0	\$0.8	scaled A1900 X 3		
				\$3.1	\$1.6			
1	HE fragment Separator	\$19.2						
1.1	dipoles (3)		\$3.0	26.1	\$1.0	scaled A1900 magnets		
1.2	quads (12trip 1 5Q)		\$10.0	87.7	\$3.4	scaled A1900 magnets		
1.3	Wein filters (2)		\$2.3	20.0	\$0.8	guess		
1.4	corr magnets (10V 10H)		\$0.5	5.3	\$0.1	10% of dipole cost		
1.5	power supplies		\$1.8	8.6	\$1.2	15% of magnet cost (A1900)		
1.6	vacuum &controls		\$1.3	9.5	\$0.6	10% of magnet cost (A1900)		
1.8	boxes, det, etc		\$0.3	0.9	\$0.2	10% of quad-dipole cost (A1900)		
			\$19.0	\$11.6	\$7.4			
2	Beam Transport to Vaults	\$3.9						
2.1	dipoles (5)		\$1.0	9.7	\$0.3	scaled A1900 magnets(30degrees)		
2.2	quads (21 doub)		\$1.9	16.2	\$0.6	scaled S800 magnets		
2.3	corr magnets (20V 20H)		\$0.1	0.8	\$0.0			
2.4	power supplies		\$0.3	1.2	\$0.2			
2.5	vacuum &controls		\$0.3	2.0	\$0.2			
2.6	boxes, det, etc		\$0.3	3.1	\$0.1			
			\$3.8	\$2.4	\$1.4			